



IFWO

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/820,622

DATE: 10/01/2004  
TIME: 10:50:21

Input Set : N:\LMOORE\pto.lm.txt  
Output Set: N:\CRF4\10012004\J820622.raw

4 <110> APPLICANT: Sirna Therapeutics, Inc.  
5 Susan, Radka  
7 <120> TITLE OF INVENTION: Antibodies Having Specificity for Nucleic Acids  
9 <130> FILE REFERENCE: 900/051 (MBHB02-030-B)  
11 <140> CURRENT APPLICATION NUMBER: US 10/820,622  
12 <141> CURRENT FILING DATE: 2004-04-08  
14 <150> PRIOR APPLICATION NUMBER: US 10/366,191  
15 <151> PRIOR FILING DATE: 2003-02-12  
17 <150> PRIOR APPLICATION NUMBER: US 60/356,298  
18 <151> PRIOR FILING DATE: 2002-02-13  
20 <160> NUMBER OF SEQ ID NOS: 76  
22 <170> SOFTWARE: PatentIn version 3.0  
25 <210> SEQ ID NO: 1  
26 <211> LENGTH: 34  
27 <212> TYPE: RNA  
28 <213> ORGANISM: Artificial Sequence  
30 <220> FEATURE:  
31 <223> OTHER INFORMATION: Description of Artificial Sequence: Enzymatic Nucleic Acid  
35 <220> FEATURE:  
36 <221> NAME/KEY: misc\_feature  
37 <222> LOCATION: (1)..(4)  
38 <223> OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage  
40 <220> FEATURE:  
41 <221> NAME/KEY: misc\_feature  
42 <222> LOCATION: (1)..(7)  
43 <223> OTHER INFORMATION: 2'-O-Methyl  
45 <220> FEATURE:  
46 <221> NAME/KEY: misc\_feature  
47 <222> LOCATION: (11)..(11)  
48 <223> OTHER INFORMATION: 2'-O-Methyl  
50 <220> FEATURE:  
51 <221> NAME/KEY: misc\_feature  
52 <222> LOCATION: (13)..(25)  
53 <223> OTHER INFORMATION: 2'-O-Methyl  
55 <220> FEATURE:  
56 <221> NAME/KEY: misc\_feature  
57 <222> LOCATION: (27)..(28)  
58 <223> OTHER INFORMATION: 2'-O-Methyl  
60 <220> FEATURE:  
61 <221> NAME/KEY: misc\_feature  
62 <222> LOCATION: (30)..(34)  
63 <223> OTHER INFORMATION: 2'-O-Methyl  
65 <220> FEATURE:

ENTERED

pp6-7

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/820,622

DATE: 10/01/2004

TIME: 10:50:21

Input Set : N:\LMOORE\pto.lm.txt  
 Output Set: N:\CRF4\10012004\J820622.raw

66 <221> NAME/KEY: misc\_feature  
 67 <222> LOCATION: (8)..(8)  
 68 <223> OTHER INFORMATION: 2'-deoxy-2'-C-allyl  
 71 <220> FEATURE:  
 72 <221> NAME/KEY: misc\_feature  
 73 <222> LOCATION: (34)..(34)  
 74 <223> OTHER INFORMATION: 3'-end phosphate attached to an inverted deoxyabasic moiety,  
 in a 3'-3  
 75 orientation  
 77 <400> SEQUENCE: 1  
 78 gaguuugcuga ugaggccgaa aggccgaaag ucug 34  
 81 <210> SEQ ID NO: 2  
 82 <211> LENGTH: 13  
 84 <212> TYPE: RNA  
 85 <213> ORGANISM: Homo Sapien  
 87 <400> SEQUENCE: 2  
 88 ugagcugcac ugc 13  
 91 <210> SEQ ID NO: 3  
 92 <211> LENGTH: 33  
 93 <212> TYPE: RNA  
 94 <213> ORGANISM: Artificial Sequence  
 96 <220> FEATURE:  
 97 <223> OTHER INFORMATION: Description of Artificial Sequence: Enzymatic Nucleic Acid  
 100 <220> FEATURE:  
 101 <221> NAME/KEY: misc\_feature  
 102 <222> LOCATION: (1)..(4)  
 103 <223> OTHER INFORMATION: Phosphorothioate 3'-Internucleotide Linkage  
 105 <220> FEATURE:  
 106 <221> NAME/KEY: misc\_feature  
 107 <222> LOCATION: (1)..(15)  
 108 <223> OTHER INFORMATION: 2'-O-Methyl  
 110 <220> FEATURE:  
 111 <221> NAME/KEY: misc\_feature  
 112 <222> LOCATION: (17)..(22)  
 113 <223> OTHER INFORMATION: 2'-O-Methyl  
 115 <220> FEATURE:  
 116 <221> NAME/KEY: misc\_feature  
 117 <222> LOCATION: (25)..(25)  
 118 <223> OTHER INFORMATION: 2'-O-Methyl  
 121 <220> FEATURE:  
 122 <221> NAME/KEY: misc\_feature  
 123 <222> LOCATION: (27)..(33)  
 124 <223> OTHER INFORMATION: 2'-O-Methyl  
 126 <220> FEATURE:  
 127 <221> NAME/KEY: misc\_feature  
 128 <222> LOCATION: (16)..(16)  
 129 <223> OTHER INFORMATION: 2'-deoxy-2'-amino  
 132 <220> FEATURE:  
 133 <221> NAME/KEY: misc\_feature  
 134 <222> LOCATION: (26)..(26)

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/820,622

DATE: 10/01/2004  
TIME: 10:50:21

Input Set : N:\LMOORE\pto.lm.txt  
Output Set: N:\CRF4\10012004\J820622.raw

135 <223> OTHER INFORMATION: 2'-deoxy-2'-amino  
137 <220> FEATURE:  
138 <221> NAME/KEY: misc\_feature  
139 <222> LOCATION: (33)..(33)  
140 <223> OTHER INFORMATION: 3'-end phosphate attached to an inverted deoxyabasic moiety,  
in a 3'-3

141 orientation  
143 <400> SEQUENCE: 3  
144 gcaguggccg aaaggcgagu gaggucuagc uca 33  
147 <210> SEQ ID NO: 4  
148 <211> LENGTH: 15  
149 <212> TYPE: RNA  
150 <213> ORGANISM: Artificial Sequence  
152 <220> FEATURE:  
153 <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid Substrate  
156 <220> FEATURE:  
157 <221> NAME/KEY: misc\_feature  
158 <222> LOCATION: (1)..(6)  
159 <223> OTHER INFORMATION: n stands for a, c, g, or u  
162 <220> FEATURE:  
163 <221> NAME/KEY: misc\_feature  
164 <222> LOCATION: (9)..(15)  
165 <223> OTHER INFORMATION: n stands for a, c, g, or u  
167 <400> SEQUENCE: 4

15

W--> 168 nnnnnnuhnn nnnnn  
171 <210> SEQ ID NO: 5  
172 <211> LENGTH: 36  
173 <212> TYPE: RNA  
174 <213> ORGANISM: Artificial Sequence  
176 <220> FEATURE:  
177 <223> OTHER INFORMATION: Description of Artificial Sequence: Enzymatic Nucleic Acid  
180 <220> FEATURE:  
181 <221> NAME/KEY: misc\_feature  
182 <222> LOCATION: (1)..(7)  
183 <223> OTHER INFORMATION: n stands for a, c, g, or u  
185 <220> FEATURE:  
186 <221> NAME/KEY: misc\_feature  
187 <222> LOCATION: (16)..(18)  
188 <223> OTHER INFORMATION: n stands for a, c, g, or u  
190 <220> FEATURE:  
191 <221> NAME/KEY: misc\_feature  
192 <222> LOCATION: (23)..(25)  
193 <223> OTHER INFORMATION: n stands for a, c, g, or u  
195 <220> FEATURE:  
196 <221> NAME/KEY: misc\_feature  
197 <222> LOCATION: (31)..(36)  
198 <223> OTHER INFORMATION: n stands for a, c, g, or u  
201 <220> FEATURE:  
202 <221> NAME/KEY: misc\_feature  
203 <222> LOCATION: (1)..(8)

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/820,622

DATE: 10/01/2004  
TIME: 10:50:21

Input Set : N:\LMOORE\pto.lm.txt  
Output Set: N:\CRF4\10012004\J820622.raw

204 <223> OTHER INFORMATION: 2'-O-Methyl  
 206 <220> FEATURE:  
 207 <221> NAME/KEY: misc\_feature  
 208 <222> LOCATION: (12)..(12)  
 209 <223> OTHER INFORMATION: 2'-O-Methyl  
 211 <220> FEATURE:  
 212 <221> NAME/KEY: misc\_feature  
 213 <222> LOCATION: (14)..(26)  
 214 <223> OTHER INFORMATION: 2'-O-Methyl  
 216 <220> FEATURE:  
 217 <221> NAME/KEY: misc\_feature  
 218 <222> LOCATION: (28)..(29)  
 219 <223> OTHER INFORMATION: 2'-O-Methyl  
 221 <220> FEATURE:  
 222 <221> NAME/KEY: misc\_feature  
 223 <222> LOCATION: (31)..(36)  
 224 <223> OTHER INFORMATION: 2'-O-Methyl  
 226 <220> FEATURE:  
 227 <221> NAME/KEY: misc\_feature  
 228 <222> LOCATION: (9)..(9)  
 229 <223> OTHER INFORMATION: 2'-deoxy-2'-C-Allyl  
 231 <400> SEQUENCE: 5  
 W--> 232 nnnnnncug augagnnnga aannncgaaa nnnnnn36  
 235 <210> SEQ ID NO: 6  
 236 <211> LENGTH: 14  
 237 <212> TYPE: RNA  
 238 <213> ORGANISM: Artificial Sequence  
 240 <220> FEATURE:  
 241 <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid Substrate  
 244 <220> FEATURE:  
 245 <221> NAME/KEY: misc\_feature  
 246 <222> LOCATION: (1)..(5)  
 247 <223> OTHER INFORMATION: n stands for a, c, g, or u  
 249 <220> FEATURE:  
 250 <221> NAME/KEY: misc\_feature  
 251 <222> LOCATION: (8)..(14)  
 252 <223> OTHER INFORMATION: n stands for a, c, g, or u  
 254 <400> SEQUENCE: 6  
 W--> 255 nnnnnchnnn nnnn 14  
 258 <210> SEQ ID NO: 7  
 259 <211> LENGTH: 35  
 260 <212> TYPE: RNA  
 261 <213> ORGANISM: Artificial Sequence  
 263 <220> FEATURE:  
 264 <223> OTHER INFORMATION: Description of Artificial Sequence: Enzymatic Nucleic Acid  
 267 <220> FEATURE:  
 268 <221> NAME/KEY: misc\_feature  
 269 <222> LOCATION: (1)..(7)  
 270 <223> OTHER INFORMATION: n stands for a, c, g, or u

RAW SEQUENCE LISTING DATE: 10/01/2004  
 PATENT APPLICATION: US/10/820,622 TIME: 10:50:21

Input Set : N:\LMOORE\pto.lm.txt  
 Output Set: N:\CRF4\10012004\J820622.raw

272 <220> FEATURE:  
 273 <221> NAME/KEY: misc\_feature  
 274 <222> LOCATION: (16)..(18)  
 275 <223> OTHER INFORMATION: n stands for a, c, g, or u  
 277 <220> FEATURE:  
 278 <221> NAME/KEY: misc\_feature  
 279 <222> LOCATION: (23)..(25)  
 280 <223> OTHER INFORMATION: n stands for a, c, g, or u  
 282 <220> FEATURE:  
 283 <221> NAME/KEY: misc\_feature  
 284 <222> LOCATION: (31)..(35)  
 285 <223> OTHER INFORMATION: n stands for a, c, g, or u  
 287 <220> FEATURE:  
 288 <221> NAME/KEY: misc\_feature  
 289 <222> LOCATION: (1)..(8)  
 290 <223> OTHER INFORMATION: 2'-O-Methyl  
 292 <220> FEATURE:  
 293 <221> NAME/KEY: misc\_feature  
 294 <222> LOCATION: (12)..(12)  
 295 <223> OTHER INFORMATION: 2'-O-Methyl  
 297 <220> FEATURE:  
 298 <221> NAME/KEY: misc\_feature  
 299 <222> LOCATION: (14)..(26)  
 300 <223> OTHER INFORMATION: 2'-O-Methyl  
 302 <220> FEATURE:  
 303 <221> NAME/KEY: misc\_feature  
 304 <222> LOCATION: (28)..(29)  
 305 <223> OTHER INFORMATION: 2'-O-Methyl  
 307 <220> FEATURE:  
 308 <221> NAME/KEY: misc\_feature  
 309 <222> LOCATION: (31)..(35)  
 310 <223> OTHER INFORMATION: 2'-O-Methyl  
 312 <220> FEATURE:  
 313 <221> NAME/KEY: misc\_feature  
 314 <222> LOCATION: (30)..(30)  
 315 <223> OTHER INFORMATION: n stands for Inosine  
 317 <220> FEATURE:  
 318 <221> NAME/KEY: misc\_feature  
 319 <222> LOCATION: (9)..(9)  
 320 <223> OTHER INFORMATION: 2'-deoxy-2'-C-Allyl  
 322 <400> SEQUENCE: 7  
 N--> 323 nnnnnnnncug augagnnnnga aannncgaan nnnnn 35  
 326 <210> SEQ ID NO: 8  
 327 <211> LENGTH: 15  
 328 <212> TYPE: RNA  
 329 <213> ORGANISM: Artificial Sequence  
 331 <220> FEATURE:  
 332 <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleic Acid Substrate  
 335 <220> FEATURE:

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/820,622

DATE: 10/01/2004  
TIME: 10:50:22

Input Set : N:\LMOORE\pto.lm.txt  
Output Set: N:\CRF4\10012004\J820622.raw

Please Note:

use of n and/or Xaa have been detected in the Sequence Listing. Please review the  
Sequence Listing to ensure that a corresponding explanation is presented in the <220>  
o <223> fields of each sequence which presents at least one n or Xaa.

eq#:4; N Pos. 1,2,3,4,5,6,9,10,11,12,13,14,15  
eq#:5; N Pos. 1,2,3,4,5,6,7,16,17,18,23,24,25,31,32,33,34,35,36  
eq#:6; N Pos. 1,2,3,4,5,8,9,10,11,12,13,14  
eq#:7; N Pos. 1,2,3,4,5,6,7,16,17,18,23,24,25,30,31,32,33,34,35  
eq#:8; N Pos. 1,2,3,4,5,6,9,10,11,12,13,14,15  
eq#:9; N Pos. 1,2,3,4,5,6,7,29,30,31,32,33,34,35  
eq#:18; N Pos. 1,12,13  
eq#:19; N Pos. 1  
eq#:20; N Pos. 1  
eq#:21; N Pos. 1,4,6,11,12,16,17,22  
eq#:22; N Pos. 1,7,17  
eq#:23; N Pos. 1  
eq#:24; N Pos. 1  
eq#:25; N Pos. 1  
eq#:26; N Pos. 1  
eq#:27; N Pos. 1  
eq#:28; N Pos. 1  
eq#:29; N Pos. 1  
eq#:30; N Pos. 1  
seq#:31; N Pos. 1,4,6,11,12  
seq#:32; N Pos. 1  
seq#:33; N Pos. 1,12,13  
seq#:34; N Pos. 1  
seq#:35; N Pos. 1  
seq#:36; N Pos. 1  
seq#:37; N Pos. 1  
seq#:51; N Pos. 1,21,22  
seq#:52; N Pos. 20,21  
seq#:53; N Pos. 1,22,23  
seq#:54; N Pos. 20,21  
seq#:55; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21  
seq#:56; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21  
seq#:57; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21  
seq#:58; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21  
seq#:59; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21  
seq#:60; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21  
seq#:61; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21  
seq#:62; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21  
seq#:63; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21  
seq#:64; N Pos. 20,21  
seq#:65; N Pos. 20,21  
seq#:66; N Pos. 20,21  
seq#:67; N Pos. 20,21  
seq#:68; N Pos. 20,21

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/820,622

DATE: 10/01/2004  
TIME: 10:50:22

Input Set : N:\LMOORE\pto.lm.txt  
Output Set: N:\CRF4\10012004\J820622.raw

eq#:69; N Pos. 20,21  
eq#:70; N Pos. 20,21  
eq#:71; N Pos. 20,21  
eq#:72; N Pos. 20,21  
eq#:76; N Pos. 23,24

**VERIFICATION SUMMARY** DATE: 10/01/2004  
 PATENT APPLICATION: US/10/820,622 TIME: 10:50:22

Input Set : N:\LMOORE\pto.lm.txt  
 Output Set: N:\CRF4\10012004\J820622.raw

L:168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
 L:232 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
 L:255 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
 L:323 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
 L:346 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0  
 L:392 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0  
 L:712 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0  
 L:741 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0  
 L:777 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0  
 L:850 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0  
 L:898 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0  
 L:946 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0  
 L:974 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0  
 L:1003 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0  
 L:1031 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0  
 L:1054 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0  
 L:1082 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0  
 L:1110 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0  
 L:1144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0  
 L:1198 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0  
 L:1221 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0  
 L:1260 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0  
 L:1278 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0  
 L:1301 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0  
 L:1329 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0  
 L:1353 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0  
 L:1845 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:0  
 L:1893 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:0  
 L:1961 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:0  
 L:2014 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54 after pos.:0  
 L:2041 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:0  
 L:2069 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:0  
 L:2097 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:0  
 L:2130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58 after pos.:0  
 L:2163 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59 after pos.:0  
 L:2195 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:0  
 L:2228 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:0  
 L:2260 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:0  
 L:2293 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63 after pos.:0  
 L:2320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:64 after pos.:0  
 L:2347 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65 after pos.:0  
 L:2429 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66 after pos.:0  
 L:2516 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:67 after pos.:0  
 L:2573 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68 after pos.:0  
 L:2630 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:0  
 L:2687 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70 after pos.:0  
 L:2739 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:0  
 L:2827 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:0

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/820,622

DATE: 10/01/2004

TIME: 10:50:22

Input Set : N:\LMOORE\pto.lm.txt

Output Set: N:\CRF4\10012004\J820622.raw

L:2883 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:76 after pos.:0